



**UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office**

Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

TN

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
-----------------	-------------	----------------------	---------------------

09/404,715    09/24/99    KUMAKURA

T    511.37656X00

EXAMINER
----------

020457    IM22/0925  
ANTONELLI TERRY STOUT AND KRAUS  
SUITE 1800  
1300 NORTH SEVENTEENTH STREET  
ARLINGTON VA 22209

REDDICK, M	
ART UNIT	PAPER NUMBER

1713  
DATE MAILED:

5  
09/25/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

BEST AVAILABLE COPY

# Office Action Summary

Application No.

09/404,715

Applicant(s)

KUMAKURA ET AL.

Examiner

Judy M. Reddick

Art Unit

1713

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 24 September 1999 and 09 November 1999.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) 15-18 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7-9 is/are allowed.
- 6) ☒ Claim(s) 1-6 and 10-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-18 are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

**Election/Restrictions**

**1. Restriction to one of the following inventions is required under 35 U.S.C. 121:**

**I. Claims 1-14, drawn to an adhesive/an adhesive-coated metal foil, classified in class 524, subclass 433.**

**II. Claims 15-18, drawn to a metal-clad laminate, classified in class 156, subclass 327.**

**2. The inventions are distinct, each from the other because:**

**3. Inventions Group I and Group II are related as mutually exclusive species in an intermediate-final product relationship. Distinctness is proven for claims in this relationship if the intermediate product is useful to make other than the final product (MPEP § 806.04(b), 3rd paragraph), and the species are patentably distinct (MPEP § 806.04(h)). In the instant case, the intermediate product is deemed to be useful as a safety glass interlayer and the inventions are deemed patentably distinct since there is nothing on this record to show them to be obvious variants. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions anticipated by the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention. The intermediate product is in mutually exclusive relationship with the final product as per presumably a reaction taking place upon formation of**

Art Unit: 1713

*the metal-clad laminate, i.e., the intermediate product(adhesive composition) loses its identity upon formation of the final product(metal-clad laminate).*

*4. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.*

*5. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.*

*6. During a telephone conversation with Mr. William I. Solomon on 09/19/01 a provisional election was made without traverse to prosecute the invention of Group I, claims 1-14. Affirmation of this election must be made by applicant in replying to this Office action. Claims 15-18 have been withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.*

**Priority**

*7. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.*

**Information Disclosure Statement**

*8. The information disclosure statement filed on 09/24/99 has been carefully considered and placed in the application file.*

**Claim Rejections - 35 USC § 112**

Art Unit: 1713

9. *The following is a quotation of the second paragraph of 35 U.S.C. 112:*

*The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.*

10. *Claims 1-6 and 12-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.*

A) *The recited "wherein a tracking resistance test is carried out" per claim 1 constitutes indefinite subject matter as per it not being readily ascertainable as to how such further limits the antecedently recited "adhesive composition".*

B) *The recited "after curing" per claim 3 constitutes indefinite subject matter as per it not being readily ascertainable as to how such further limits the claim.*

C) *The recited "compatible with the polyvinyl acetal resin uniformly" per claim 4 constitutes indefinite subject matter as per the metes and bounds of the term "uniformly", in this context, engenders an indeterminacy in scope. Further, "uniformly" is positioned awkwardly.*

D) *The recited "compound" per claim 6 constitutes indefinite subject matter as per it not being readily ascertainable as to how such further limits the antecedently recited "thermosetting resin".*

***Claim Rejections - 35 USC § 102***

11. *The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:*

*A person shall be entitled to a patent unless –*

Art Unit: 1713

*(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.*

*(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.*

*(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.*

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

*(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.*

13. Claims 1-5 and 12-14 are rejected under 35 U.S.C. 102(a, b or e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over JP63086780A(ABSTRACT), Kumakura et al(U.S. 5,066,691), Ishii et al(U.S. 5,314,740), Tracy et al(U.S. 5,364,703), Saida et al(U.S. 5,674,611), Saida et al(U.S. 5,959,256) or Satoh et al(U.S. 6,165,617).

*Each of patentees supra disclose and exemplify adhesive compositions, useful for application to a metal foil such as a copper foil, defined basically as containing a polyvinyl acetal resin and a thermosetting resin which includes a melamine resin, resole resin, epoxy-type resins, urethane resins, etc. and other conventional additives which clearly*

*overlap in scope with the components of claims 12 and 13. Each of patentees therefore anticipate the instantly claimed invention with the understanding that the components of the adhesive compositions of each patentee clearly overlaps in scope with the components of the claimed adhesive composition.*

*It is reasonably presumed, if not taught, that the property limitations per the claimed invention may very well be met by each of patentees since the compositions of patentees are essentially the same as and made under essentially the same conditions as the claimed adhesive composition.*

*Consult In re Best et al(195 USPQ 430).*

*See, e.g., the Abstract of JP'780, the Abstract, cols. 2-4, Runs 1-5 and the claims of Kumakura et al, the Abstract, cols. 3-4 and Runs 1 and 2 of Ishii et al, the Abstract, cols. 2 and 4 and the claims of Tracy et al, the Abstract, cols. 2-4, Runs 1-3 and the claims of Saida et al, the Abstract, cols. 2-7, Run 1 and the claims of Saida et al and the Abstract, cols. 2-5, Runs 1 and 2 and the claims of Satoh et al.*

14. *Claims 1-6 and 10-14 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Nowak et al(U.S. 4,194,955).*

*Nowak et al disclose and exemplify coating compositions, useful for application to metallic substrates, defined basically as containing a homogeneous blend of a) a polyvinyl butyral, b) vinyl acetate, c) a polymerizable polyfunctional monomer which includes trimethylolpropane triacrylate, pentaerythritol triacrylate, d) a*

Art Unit: 1713

*photoinitiator, and e) the conventional additives sufficient to meet the limitations of claims 12 and 13. See, e.g., the Abstract, c ls. 2-4 and the Runs and claims of Nowak et al. Nowak et al therefore anticipate the instantly claimed invention with the understanding that the components of the coating composition of Nowak et al clearly overlap in scope with the components of the composition, as claimed.*

*It is reasonably presumed that the property limitations, as claimed, may very well be met by the composition of Nowak et al since the composition of patentee is essentially the same as the claimed composition. Reference Best et al(195 USPQ 430).*

**Allowable Subject Matter**

15. *Claims 7-9 are deemed allowable over the prior art of record.*

**Conclusion**

16. *U.S. 4,751,136 to Kamiya et al is cited as of interest and considered merely cumulative to the prior art supra.*

*Any inquiry concerning this communication or earlier communications from the examiner should be directed to Judy M. Reddick whose telephone number is (703)308-4346. The examiner can normally be reached on Monday-Friday, 6:30 a.m.-3:00 p.m..*

*If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (703)308-2450. The fax phone numbers for the organization where this application or proceeding is assigned are (703)872-9310 for regular communications and (703)892-9311 for After Final communications.*



Application/Control Number: 09/404,715

Page 8

Art Unit: 1713

***Any inquiry of a general nature relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-8183.***

*J. M. Reddick*  
**Judy M. Reddick**  
**Primary Examiner**  
**Art Unit 1713**

**JMR** *JMR*  
**September 20, 2001**